

# Special Senses



- Neurons that react directly to stimuli from the environment are called **sensory receptors**.
- Sensory receptors react to stimuli by sending impulses to other neurons and to the central nervous system.
- Sensory receptors are located throughout the body but are concentrated in the sense organs.
- Regardless of the type of stimuli, only nerve impulses reach the brain. The brain does the interpreting.

**There are five general categories of sensory receptors:**

**1. pain receptors**

- located throughout the body except in the brain.**
- respond to chemicals released by damaged cells**

**2. thermoreceptors**

- located in the skin, body core, and hypothalamus.**
- detect variations in temperature**

**3. mechanoreceptors**

- found in the skin, skeletal muscles, and inner ears.**
- sensitive to touch, pressure, stretching of muscles, sound, and motion.**

#### **4. chemoreceptors**

**- located in the nose and taste buds, are sensitive to chemicals in the external environment.**

#### **5. photoreceptors**

**- found in the eyes, are sensitive to light.**